Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Implementation of the Commercial Advertisement Loudness Mitigation (CALM) Act	)	MB Docket No. 11-93
	)	

REPORT AND ORDER

Adopted: December 13, 2011 **Released: December 13, 2011**

By the Commission: Chairman Genachowski and Commissioners Copps, McDowell, and Clyburn issuing separate statements.

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I. INTRODUCTION

1. With this Report & Order (*R&O*), we adopt rules to implement the Commercial Advertisement Loudness Mitigation ("CALM") Act.[1] Among other things, the CALM Act directs the Commission to incorporate into its rules by reference and make mandatory a technical standard, developed by an industry standards development body, that is designed to prevent digital television commercial advertisements from being transmitted at louder volumes than the program material they accompany.[2] As mandated by the statute, the rules apply to digital TV broadcasters, digital cable operators, and other digital multichannel video programming distributors ("MVPDs").[3] Also per the statute, the rules will take effect one year after adoption, and will therefore be effective as of December 13, 2012.[4] The rules we adopt today are designed to protect viewers from excessively loud commercials and, at the same time, permit broadcasters and MVPDs to implement their obligations in a minimally burdensome manner. As described below, we will require broadcast stations and MVPDs to ensure that all commercials are transmitted to consumers at the appropriate loudness level in accordance with the industry standard. In the event of a pattern or trend of complaints, stations and MVPDs will be deemed in compliance with regard to their locally inserted commercials if they demonstrate that they use certain equipment in the ordinary course of business.[5] For the embedded commercials that stations and MVPDs pass through from programmers, we also establish a "safe harbor" to demonstrate compliance through

[1] Pub. L. No. 111-311, 124 Stat. 3294 (2010) (codified at 47 U.S.C. § 621). The CALM Act was enacted on December 15, 2010 (S. 2847, 111th Cong.). The relevant legislative history includes the Senate and House Committee Reports to bills S. 2847 and H.R. 1084, respectively, as well as the Senate and House Floor Consideration of these bills. *See* Senate Commerce, Science, and Transportation Committee Report dated Sept. 29, 2010, accompanying Senate Bill, S. 2847, 111th Cong. (2010), S. REP. 111-340 ("*Senate Committee Report to S. 2847*"); House Energy and Commerce Committee Report dated Dec. 14, 2009, accompanying House Bill, H.R. 1084, 111th Cong. (2009), H.R. REP. 111-374 ("*House Committee Report to H.R. 1084*"); Senate Floor Consideration of S. 2847, 156 Cong. Rec. S7763 (daily ed. Sept. 29, 2010) (bill passed) ("*Senate Floor Debate*"); House Floor Consideration of S. 2847, 156 Cong. Rec. H7720 (daily ed. Nov. 30, 2010) ("*House Floor Debate of S. 2847*") and H7899 (daily ed. Dec. 2, 2010) (bill passed); House Floor Consideration of H.R. 1084, 155 Cong. Rec. H14907 (daily ed. Dec. 15, 2009). The Senate and House Committee Reports were prepared before the bill was amended to add Section 2(c) of the CALM Act (the compliance provision). *See Senate Floor Debate* at S7763-S7764 (approving "amendment No. 4687"). *See also House Floor Debate of S. 2847* at H7720 (Rep. Eshoo stating that "[w]ith the passage of this legislation, we will end the practice of consumers being subjected to advertisements that are ridiculously loud, and we can protect people from needlessly loud noise spikes that can actually harm their hearing. This technical fix is long overdue, and under the CALM Act, as amended by the Senate, consumers will be in the driver's seat."). We note that our action herein satisfies the statutory mandate that the Commission adopt final rules in this proceeding on or before December 15, 2011.

[2] *See* Advanced Television Systems Committee ("ATSC") A/85: "ATSC Recommended Practice: Techniques for Establishing and Maintaining Audio Loudness for Digital Television," (July 25, 2011) ("RP" or "the RP"). *See infra* note 23 regarding the ATSC. To obtain a copy of the RP, visit the ATSC website: http://www.atsc.org/cms/standards/a_85-2011a.pdf. *See also* CALM Act § 2(a); *Senate Committee Report to S. 2847* at 1; *House Committee Report to H.R. 1084* at 1.

[3] *See* CALM Act § 2(a).

[4] *See* CALM Act § 2(b)(1). *See also, infra,* discussion of waivers to delay the effective date for individual stations and MVPDs based on financial hardship, paras. 49-58.

[5] "Locally inserted" commercials are commercials added to a programming stream by a station or MVPD prior to or at the time of transmission to viewers. In contrast, commercials that are placed into the programming stream by a third party (i.e., programmer) and passed through by the station or MVPD to viewers are referred to herein as "embedded" commercials. As discussed below, the RP recommends different practices for stations and MVPDs to control the loudness of commercials depending on whether the commercials are locally inserted or embedded. *See infra*, para. 11.

certifications and periodic testing.[6] This regime will make compliance less burdensome for the industry while ensuring appropriate loudness for all commercials.

II. BACKGROUND

2. The CALM Act was enacted into law on December 15, 2010 in response to consumer complaints about "loud commercials."[7] The Commission has received complaints about loud commercials virtually since the inception of commercial television more than 50 years ago.[8] Indeed, loud commercials have been a leading source of complaints to the Commission since the FCC Consumer Call Center began reporting the top consumer complaints in 2002.[9] One common complaint is that a commercial is markedly louder than adjacent programming.[10] The problem occurs in over-the-air broadcast television programming, as well as in cable, Direct Broadcast Satellite ("DBS") and other video programming. The text of the CALM Act provides in relevant part as follows:[11]

> (2) (a) Rulemaking required. Within 1 year after the date of enactment of this Act, the Federal Communications Commission shall prescribe pursuant to the Communications Act of 1934 (47 U.S.C. 151 *et seq*.) a regulation that is limited to incorporating by reference and making mandatory (subject to any waivers the Commission may grant) the "Recommended Practice: Techniques for Establishing and Maintaining Audio Loudness for Digital Television" (A/85), and any successor thereto, approved by the Advanced Television Systems Committee, only insofar as such recommended practice concerns the transmission of commercial advertisements by a television broadcast station, cable operator, or other multichannel video programming distributor.[12]
>
> (b) Implementation

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[6] *See supra* note 5.

[7] *See supra* note 1. *See also House Floor Debate of S. 2847* at H 7721 (Rep. Eshoo stating that the law is in response to "the complaints that the American people have registered with the FCC over the last 50 years").

[8] *See Amendment of the Commission's Rules To Eliminate Objectionable Loudness of Commercial Announcements and Commercial Continuity Over AM, FM, and Television Broadcast Stations*, BC Docket No. 79-168, Memorandum Opinion and Order, 56 Rad. Reg. 2d (P & F) 390, 391, para. 2 (1984) ("*1984 Order*") (observing in 1984 that "the Commission has received complaints of loud commercials for at least the last 30 years"). *See also* 47 C.F.R. § 73.4075.; Public Notice, "Statement of Policy Concerning Loud Commercials," 1 FCC 2d 10, para. 20(a) (1965) ("*1965 Policy Statement*") (concluding that "complaints of loud commercials are numerous enough to require corrective action by the industry and regulatory measures by the Commission").

[9] To view the FCC's Quarterly Inquiries and Complaints Reports, visit http://www.fcc.gov/cgb/quarter/. According to the FCC Consumer Call Center, since January 2008, the Commission has received approximately 1,000 complaints and 5,000 inquiries from consumers about "loud commercials." The average number of monthly complaints has dropped by 50% since 2009.

[10] *See Senate Committee Report to S. 2847* at 1-2. *See also* Public Notice, "Statement of Policy Concerning Loud Commercials," 1 FCC 2d 10, para. 15 (1965) ("*1965 Policy Statement*") (stating that a "common source of complaint is the contrast between loudness of commercials as compared to the volume of preceding program material – *e.g.*, soft music or dialogue immediately followed by a rapid-fire, strident commercial").

[11] *See* 47 U.S.C. § 621 (2010). *See also* 47 U.S.C. § 609 (2010).

[12] *Id*. § 621(a).

> (1) Effective Date. The Federal Communications Commission shall prescribe that the regulation adopted pursuant to subsection (a) shall become effective 1 year after the date of its adoption.[13]
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> (2) Waiver. For any television broadcast station, cable operator, or other multichannel video programming distributor that demonstrates that obtaining the equipment to comply with the regulation adopted pursuant to subsection (a) would result in financial hardship, the Federal Communications Commission may grant a waiver of the effective date set forth in paragraph (1) for 1 year and may renew such waiver for 1 additional year.[14]
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> (3) Waiver Authority. Nothing in this section affects the Commission's authority under section 1.3 of its rules (47 C.F.R. 1.3) to waive any rule required by this Act, or the application of any such rule, for good cause shown to a television broadcast station, cable operator, or other multichannel video programming distributor, or to a class of such stations, operators, or distributors.[15]

(c) Compliance. Any broadcast television operator, cable operator, or other multichannel video programming distributor that installs, utilizes, and maintains in a commercially reasonable manner the equipment and associated software in compliance with the regulations issued by the Federal Communications Commission in accordance with subsection (a) shall be deemed to be in compliance with such regulations.[16]

(d) Definitions. For purposes of this section—

> (1) the term "television broadcast station" has the meaning given such term in section 325 of the Communications Act of 1934 (47 U.S.C. 325);[17] and
>
> (2) the terms "cable operator" and "multi-channel video programming distributor" have the meanings given such terms in section 602 of Communications Act of 1934 (47 U.S.C. 522).[18]

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[13] *Id*. § 621(b)(1).

[14] *Id*. § 621(b)(2).

[15] *Id*. § 621(b)(3).

[16] *Id*. § 621(c).

[17] *Id*. § 621(d)(1). Section 325 of the Communications Act defines the term "television broadcast station" as "an over-the-air commercial or non-commercial television broadcast station licensed by the Commission under subpart E of part 73 of title 47, Code of Federal Regulations, except that such term does not include a low-power or translator television station." 47 U.S.C. § 325(b)(7)(B).

[18] *Id*. § 621(d)(2). Section 602 of Communications Act defines the term "cable operator" as "any person or group of persons (A) who provides cable service over a cable system and directly or through one or more affiliates owns a significant interest in such cable system, or (B) who otherwise controls or is responsible for, through any arrangement, the management and operation of such a cable system." 47 U.S.C. § 522(5). Section 602 of Communications Act defines the term "multichannel video programming distributor" as "a person such as, but not limited to, a cable operator, a multichannel multipoint distribution service, a direct broadcast satellite service, or a

(continued….)

3. The Commission has not regulated the "loudness" of commercials in the past, primarily because of the difficulty of crafting effective rules due to both "the subjective nature" of loudness and the technical limitations of the NTSC standard used in analog television.[19] The Commission has incorporated by reference into its rules various industry standards on digital television, but these standards alone have not described a consistent method for industry to measure and control audio loudness.[20] The loud commercial problem seems to have been exacerbated by the transition to digital television, perhaps because DTV's expanded aural dynamic range allows for greater variations in loudness for cinema-like

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television receive-only satellite program distributor, who makes available for purchase, by subscribers or customers, multiple channels of video programming." 47 U.S.C. § 522(13).

[19] *1984 Order* at para. 14. In 1965, the Commission issued a policy statement, stating that broadcast licensees "have an affirmative obligation to see that objectionably loud commercials are not broadcast" and must make a "good faith effort" to "prevent the presentation of commercials which are too loud." *See 1965 Policy Statement*, 1 FCC 2d at paras. 16-17 (1965); *republished in* Public Notice, "Objectionably Loud Commercials," 54 FCC 2d 1214 (1975). As noted by H&E's comments, the Commission has imposed forfeitures for airing objectionably loud commercials. *See* H&E Comments at 1-2. However, in 1984, the Commission terminated a proceeding initiated in 1979 that considered whether to adopt rules to eliminate loud commercials, finding that new regulations were not warranted because of the advent of new technology, such as the mute button on remote controls, and noting the difficulty in crafting effective rules "due to the subjective nature of many of the factors that contribute to loudness." *See 1984 Order* at para. 14. *See also Amendment to Part 73 of the Commission's Rules and Regulations to Eliminate Objectionable Loudness of Commercial Announcements and Commercial Continuity over AM, FM and Television Broadcast Stations*, BC Docket No. 79-168, Notice of Inquiry, 72 FCC 2d 677 (1979) ("*1979 NOI*"). The NTSC analog television system uses conventional audio dynamic range processing at various stages of the signal path to manage audio loudness for broadcasts, a practice which compensates for limitations in the dynamic range of analog equipment. However, this practice modifies the characteristics of the original sound, altering it from what the program provider intended. *See* RP § 1.1.

[20] 47 C.F.R. § 73.682(d) incorporates by reference and requires compliance with most of the ATSC A/53 Digital Television Standard (2007 version) relating to digital broadcast television and 47 C.F.R. § 76.640(b)(1)(iii) incorporates by reference the American National Standards Institute/ Society of Cable Telecommunications Engineers ("ANSI/SCTE") Standard 54 (2003 version) relating to digital cable television. The rules do not currently incorporate by reference a standard that applies to satellite TV ("DBS") providers. Part 5 of the ATSC Standard A/53, which includes the Dolby AC-3 DTV audio standard (a method of formatting and encoding digital multi-channel audio, used by TV broadcast stations and many traditional cable operators), has recently been updated by ATSC: in our *Video Description Order*, we updated our DTV transmission standard in Section 73.682(d) of our rules to incorporate by reference the 2010 version of Part 5 of the ATSC A/53 Digital Television Standard (relating to audio systems). *See Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010*, MB Docket No. 11-43, Report and Order, 76 FR 55585, para. 52 (2011) ("*Video Description Order*"). *See also* ATSC A/53, Part 5: 2010 "ATSC Digital Television Standard, Part 5 – AC-3 Audio System Characteristics" (July 6, 2010) ("2010 ATSC A/53 Standard, Part 5"). We note that this rule change is consistent with the final rules adopted herein because the RP references and requires compliance with the same testing methodology adopted in the 2010 ATSC A/53 Standard, Part 5. *See*, *e.g.*, RP §§ 2.1 (referencing A/53) and 7.1 (stating that the RP "identifies methods to ensure consistent digital television loudness through the proper use of dialnorm metadata for all content, and thus comply with A/53"). *See infra* at para. 4. The previous version of the ATSC A/53 Standard, Part 5, which is incorporated by reference in Section 73.682(d), includes an outdated audio loudness measurement method. *See* ATSC A/53, Part 5: 2007 "ATSC Digital Television Standard, Part 5 – AC-3 Audio System Characteristics" § 5.5 at 9 (Dialogue Level) (Jan. 3, 2007) ("2007 ATSC A/53 Standard, Part 5"). The 2010 ATSC A/53 Standard, Part 5, contains the new methods to measure and control audio loudness reflected in the RP. *See* 2010 ATSC A/53 Standard, Part 5 at § 2.1 at 5 (referencing the RP) and § 5.5 at 9 (Dialogue Level). Although important, the update to A/53 alone was insufficient to fully address the commercial loudness issue, because like most of the ATSC standard it deals directly with only broadcast signals. The CALM Act and the RP are broader, explicitly covering MVPDs, and ensuring that the benefits of commercial loudness mitigation will be available to all television viewers.

sound quality. As a result, when content providers and/or stations/MVPDs do not properly manage DTV loudness, the resulting wide variations in loudness are more noticeable to consumers.[21] However, DTV technology also offers industry the opportunity to more easily manage loudness. We note that, because the Recommended Practice we are instructed to incorporate by reference and make mandatory is directed only at digital programming, the rules we adopt in this *R&O* deal only with commercials transmitted digitally, and do not apply to analog broadcasts or analog MVPD service.[22]

4. The television broadcast industry has recognized the importance of measuring and controlling volume in television programming, particularly in the context of the transition to digital television. In November 2009, the Advanced Television Systems Committee ("ATSC")[23] completed and published the first version of its A/85 Recommended Practice ("the RP"),[24] which was developed to offer guidance to the digital TV industry – from content providers to distributors – regarding loudness control.[25] The RP provides detailed guidance on loudness measurement methods for different types of content (*i.e.*, short form, long form, or file-based) at different stages of distribution (*i.e.*, production, post-production and real time production).[26] It specifically provides effective loudness management solutions for "operators"[27] to avoid large loudness variations during transitions between different types of content.[28] If all stations/MVPDs ensure that, *inter alia*, the loudness of all content is measured using the algorithm required by the RP and transmitted correctly, then consumers will be able to set their volume controls to their preferred listening (loudness) level and will not have to adjust the volume between programs and commercials.[29] The RP, like most ATSC documents, was initially intended for over-the-air TV

[21] *See* ATSC Letter by Mark Richer, ATSC President, and attached "Executive Summary of the ATSC DTV Loudness Tutorial Presented on February 1, 2011" (dated Apr. 8, 2011) ("*ATSC Letter* and *DTV Loudness Tutorial Summary*") (stating "[t]he ATSC AC-3 Digital Television Audio System has 32 times the perceived dynamic range (ratio of soft to loud sounds) than the previous NTSC analog audio system. Although this increase in dynamic range makes cinema-like sound a reality for DTV, greater loudness variation is now an unintentional consequence when loudness is not managed correctly").

[22] 47 U.S.C. § 621(a); RP § 1. *See* ACA Comments at 9 ("ATSC A/85 does not apply to analog transmissions").

[23] ATSC is an international, non-profit organization developing voluntary standards for digital television. The ATSC member organizations represent the broadcast, broadcast equipment, motion picture, consumer electronics, computer, cable, satellite, and semiconductor industries. ATSC creates and fosters implementation of voluntary Standards and Recommended Practices to advance digital television broadcasting and to facilitate interoperability with other media. *See* http://www.atsc.org/aboutatsc.html.

[24] *See* ATSC A/85: "ATSC Recommended Practice: Techniques for Establishing and Maintaining Audio Loudness for Digital Television," (Nov. 4, 2009). As noted above, the most current version of the RP, released July 25, 2011, is available at the ATSC website: http://www.atsc.org/cms/standards/a_85-2011a.pdf.

[25] *See* RP § 1. A key goal of the RP was to develop a system that would enable industry to control the variations in loudness of digital programming, while retaining the improved sound quality and dynamic range of such programming. *Id*.

[26] *See* RP § 5.

[27] The RP defines an "operator" as "[a] television network, broadcast station, DBS service, local cable system, cable multiple system operator (MSO), or other multichannel video program distributor (MVPD)." Thus, the definition includes stations and MVPDs, as well as broadcast networks and cable network programmers. *See* RP §3.4.

[28] *See* RP § 8.

[29] *See* RP § 4. If the operators use the RP properly, the loudness will also be consistent across channels. *Id*. We note that the RP does not intend to eliminate all loudness variations, but only prevent excessive loudness variations during content transitions. The RP also contains advice for systems without metadata to achieve the same result. *See* RP at Annex K.

broadcasters, in particular for AC-3[30] digital audio systems. However, the RP also sets forth the recommended approach that cable and DBS operators and other MVPDs that use AC-3 and non-AC-3 audio systems should employ.[31]

5. Compliance with the RP requires industry to use the International Telecommunication Union[32] Radiocommunication Sector ("ITU-R")[33] Recommendation BS.1770 measurement algorithm.[34] The ITU-R BS.1770 measurement algorithm provides a numerical value that indicates the perceived loudness[35] of the content measured in units of "LKFS"[36] by averaging the loudness of audio signals in all channels over the duration of the content.[37] In the RP, that value is called "dialnorm" (short for "Dialog Normalization")[38] and is to be encoded as metadata[39] into the audio stream required for digital broadcast television.[40] Stations/MVPDs transmit the dialnorm to the consumer's reception equipment.[41]

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[30] AC-3 is one method of formatting and encoding digital multi-channel audio, used by TV broadcast stations and many traditional cable operators. The AC-3 audio system is defined in the ATSC Digital Audio Compression Standard (A/52B), which is incorporated into the ATSC Digital Television Standard (A/53). *See* ATSC A/52B: "Digital Audio Compression (AC-3, E-AC-3) Standard, Revision B" (June 14, 2005).

[31] *See* RP at Annex H. *See also, infra* paras. 7, 9-17 (discussing Annex K, which added recommended practices for MVPDs that do not use AC-3 audio systems, and the mandatory nature of the RP as a result of the CALM Act).

[32] The International Telecommunication Union ("ITU") is a specialized agency of the United Nations whose goal is to promote international cooperation in the efficient use of telecommunications, including the use of the radio frequency spectrum. The ITU publishes technical recommendations concerning various aspects of radiocommunication technology. These recommendations are subject to an international peer review and approval process in which the Commission participates.

[33] The ITU Radiocommunication Sector ("ITU-R") plays a vital role in the global management of the radio-frequency spectrum and satellite orbits – limited natural resources which are increasingly in demand from a large and growing number of services such as fixed, mobile, broadcasting, amateur, space research, emergency telecommunications, meteorology, global positioning systems, environmental monitoring and communication services – that ensure safety of life on land, at sea and in the skies.

[34] *See* RP § 5 ("[t]he specified measurement techniques are based on the loudness and true peak measurements defined by ITU-R Recommendation BS.1770 – 'Algorithms to measure audio programme [*sic*] loudness and true-peak audio level'").

[35] *See* RP § 3.4 (defining ITU-R BS.1770). "Loudness" is a subjective measure based on human perception of sound waves that can be difficult to quantify and thus to measure. The ITU utilized very extensive human testing to produce an algorithm that provides a good approximation of human loudness perception of program audio to measure the loudness of programs. "Volume," in contrast to loudness, is an objective measure based on the amplitude of sound waves. *Id* (defining loudness as "[a] perceptual quantity; the magnitude of the physiological effect produced when a sound stimulates the ear").

[36] The measured value is presented in units of loudness K-weighted, relative to full scale ("LKFS"). LKFS units are equivalent to decibels. *See* RP §3.3 and § 5.1 .

[37] Loudness is measured by integrating the weighted power of the audio signals in all stereo audio channels (plus any surround-sound audio channels) over the duration of the content. *See* RP § 5.1

[38] *See* RP § 1.1.

[39] Metadata or "data about the (audio) data" is instructional information that is transmitted to the home (separately, but in the same bit stream) along with the digital audio content it describes. *See* RP § 1.1. The dialnorm and other metadata parameters are integral to the AC-3 audio bit stream.

[40] Use of AC-3 audio systems is required for TV stations as a result of the Commission's incorporation by reference into its rules of the ATSC digital TV standard, A/53, but not for cable operators or MVPDs. *See* RP § 7.1. *See also supra*, note 20. The RP addresses non-AC-3 audio systems only in new Annex K, which the ATSC approved after the CALM Act's enactment. *See id.* at Annex K.

Specifically, the RP provides operators with three metadata management modes for ensuring that the consumer's equipment receives the correct loudness value.[42]

6. The "golden rule" of the RP is that the dialnorm value must correctly identify the loudness of the content it accompanies in order to prevent excessive loudness variation during content transitions on a channel (*e.g.*, TV program to commercial) or when changing channels.[43] If the dialnorm value is correctly encoded—if it matches the loudness of the content, which depends in turn on accurate loudness measurements—the consumer's receiver will adjust the volume automatically to avoid spikes in loudness.[44]

7. In addition to requiring the Commission to incorporate the RP by reference, the CALM Act requires the Commission to incorporate by reference "any successor thereto."[45] After the CALM Act's enactment, the ATSC approved several relevant changes to the RP. The ATSC approved a first successor document to the RP on May 25, 2011 and approved a second on July 25, 2011.[46] The first successor added Annex J which provides guidance with respect to local insertions for operators using AC-3 audio systems.[47] The second successor added Annex K[48] which in turn provides instructions for operators using non-AC-3 audio systems.[49] The RP states that Annexes J and K "contain all the courses of action necessary to perform effective loudness control of digital television commercial advertising."[50]

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[41] From the consumer's perspective, the dialnorm metadata parameter defines the volume level at which the sound needs to be reproduced so that the consumer will end up with a uniform loudness level across programs and commercials without a need to adjust it again. *See* RP § 1.1. *See also ATSC DTV Loudness Tutorial Summary* at 1 ("When content is measured with the ITU-R BS.1770 measurement algorithm and dialnorm metadata is transmitted that correctly identifies the loudness of the content it accompanies, the ATSC AC-audio system presents DTV sound capable of cinema's range but without loudness variations that a viewer may find annoying."). We note, however, that compliance with the RP does not guarantee that a commercial will not seem loud to a viewer. A commercial could, for example, include loud sounds in part and softer sounds in part and overall comply with the RP. In addition, the loudness measurement algorithm does not account for all of the perceptual qualities of sound which could make a commercial seem louder to a listener.

[42] *See* RP §7.2

[43] *See ATSC DTV Loudness Tutorial Summary* at 1 ("An essential requirement (the golden rule) for management of loudness in an ATSC audio system is to ensure that the average content loudness in units of LKFS matches the metadata's dialnorm value in the AC-3 bit stream. If these two values do not match, the metadata cannot correctly ensure that the consumer's DTV sound level is consistently reproduced"). *See also* RP § 5. Following the golden rule can be accomplished in multiple ways under the RP, including using a real-time processor to ensure consistent loudness that matches the dialnorm value. We recognize, however, that this solution can be less desirable for industry and consumers in some cases, precisely because it reduces the dynamic range of the audio content. *See* RP § 8.1.1 (c), § 8.1.2 (c), and § 9.1.

[44] *See* RP § 1.1 and § 4.

[45] *See* CALM Act § 2(a).

[46] This document is available at http://www.atsc.org/cms/standards/a_85-2011a.pdf.

[47] *See* RP at Annex J.

[48] *See* RP at Annex K.

[49] The second successor document added Annex K for use by non-AC-3 digital audio systems, which includes many MVPDs. Non-AC-3 audio systems use different compression and coding techniques from AC-3, such as MPEG-1 Layer 2 (MP2) or Advanced Audio Coding (AAC). *See* RP at Annex K.

[50] *See* RP § J.1 and § K.1. Stating that it "contains the courses of action necessary to perform effective loudness control …" In the NPRM we asked how to apply the RP, through our rules, to non-AC-3 MVPD systems, since the (continued….)

Both Annexes state that "[i]t is vital that, when loudness of short form content (*e.g.*, commercial advertising) is measured, it be measured in units of LKFS including all audio channels and all elements of the soundtrack over the duration of the content."[51] Since there is no dialnorm metadata in non-AC-3 audio systems, the operator must ensure that the loudness of content measured in LKFS matches the Target Loudness[52] of the delivery channel.[53] In the context of the Annexes, the term "vital" indicates a course of action to be followed strictly (no deviation is permitted).[54] Throughout the RP, the term "should" indicates that a certain course of action is preferred but not necessarily required,[55] and the term "should not" means a certain possibility or course of action is undesirable but not prohibited.[56]

III. DISCUSSION

8. We initiated this proceeding on May 27, 2011 by issuing a Notice of Proposed Rulemaking ("NPRM").[57] We sought comment on proposals regarding compliance, waivers, and other implementation issues. As discussed below, after reviewing the concerns expressed in the record, we seek to adopt rules that recognize the distinct role played by stations and MVPDs in the transmission of commercials under the RP. Accordingly, our rules incorporate the RP and make commercial volume management mandatory, as required by the CALM Act,[58] reduce the burden associated with demonstrating compliance in the event of complaints,[59] and reflect the practical concerns described in the rulemaking record.[60]

A. Section 2(a) and Scope

9. We hereby adopt our proposal to incorporate the RP by reference into our rules,[61] as well as our tentative conclusion that the Commission may not modify the RP or adopt other actions

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RP was written with that technology as its focus. *NPRM* at para. 12. Because Annex K expressly extends the RP to non-AC-3 systems, this issue is moot, although as some commenters correctly note, these rules apply only to digital transmissions.

[51] *Id.* at J.4. The only difference between Annex J.4, quoted above, and Annex K.4 is the phrase "short form" before "content" at the end of the sentence. *Id.* at K.4.

[52] Target Loudness is a specified value, established to facilitate content exchange from a content provider to a station/MVPD. *See* RP §3.4.

[53] *See* RP § K.5.

[54] *See* RP § 3.1.

[55] *Id*.

[56] *Id*. As discussed below, because the CALM Act makes the RP mandatory with respect to commercials transmitted by stations/MVPD, we interpret the statute to require courses of action by stations/MVPDs that are recommended but not strictly required by the RP. *See infra,* discussion in para. 14.

[57] *Implementation of the Commercial Advertisement Loudness Mitigation (CALM) Act*; MB Docket No. 11-93, Notice of Proposed Rulemaking, 26 FCC Rcd 8281 (2010) ("*NPRM*").

[58] CALM Act at § 2(a).

[59] CALM Act at § 2(c).

[60] Issues raised by commenters include the difficulties of performing real-time corrections on embedded commercials (*see infra* para. 30), and the use of spot checks by large stations and MVPDs to assure compliant programming on all stations and MVPDs (*see infra* paras. 35-37).

[61] Appendix A, *Final Rules* (47 C.F.R. § 73.8000(b)(3), § 76.602(b)(10)).

inconsistent with the statute's express limitations.[62] In addition, we adopt our tentative conclusion that "*all* stations/MVPDs and not only those using AC-3 audio systems" are subject to our rules.[63] We also tentatively concluded in the NPRM that "stations/MVPDs are responsible for *all* commercials 'transmitted' by them."[64] We conclude that the statute makes each station/MVPD responsible for compliance with the RP as incorporated by reference in our rules with regard to all commercials it transmits to consumers, including both those it inserts and those that are "embedded" in programming it receives from program suppliers. As set forth below, this conclusion is consistent with the statutory language, the legislative history, and the RP.[65]

10. Our conclusion rests on our reading of the CALM Act and the RP. As set forth above, the CALM Act directs the Commission to "incorporat[e] by reference and mak[e] mandatory" the RP "only insofar as" it "concerns the transmission of commercial advertisements by a television broadcast station, cable operator, or other multichannel video programming distributor."[66] As one commenter accurately observes, the RP "relies not on a single entity to control the audio loudness, but rather on an entire 'ecosystem' of all participants to ensure that correct audio levels are maintained—ranging from when an advertisement is created through display in a consumer's home."[67] Consistent with the statute, however, the rules we adopt today are limited to station/MVPD responsibilities under the RP.[68] Our rules are also limited to the RP's methods for controlling the loudness of commercial advertisements – as opposed to regular programming – transmitted by stations/MVPDs to consumers.[69]

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[62] *See NPRM*, 26 FCC Rcd at 8288, para. 8.

[63] *See id.* at 8290 para. 12 (reasoning that "[t]he statute … expressly applies to all stations/MVPDs regardless of the audio system they currently use. Nothing in the statutory language or legislative history suggests an intent to make an exception for MVPDs that do not use AC-3 audio systems."). *See also* RP at Annex K (providing "recommendations … based on other sections of this" RP as to "courses of action necessary to perform effective loudness control … when using non-AC-3 audio codecs").

[64] *Id.* at 8289 para. 10.

[65] Our interpretation is also bolstered by a series of letters from Members of Congress who have written in support of the approach described in the NPRM. *See, e.g.*, Reply of Rep. Anna G. Eshoo (July 29, 2011) ("Eshoo Reply"); Ex Parte Comments of Sens. Sheldon Whitehouse, Sherrod Brown, Tim Johnson, Claire McCaskill, and Charles E. Schumer (September 14, 2011) ("Whitehouse Letter"); and Ex Parte Comments of Sen. John D. Rockefeller, IV, Chairman, Committee on Commerce, Science, and Transportation (October 3, 2011) ("Rockefeller Letter").

[66] 47 U.S.C. § 621(a). The RP defines an "operator" more broadly, as "[a] television network, broadcast station, DBS service, local cable system, cable multiple system operator (MSO), or other multichannel video program distributor (MVPD).

[67] NCTA Comments at 4. *See, e.g.,* RP § 7.3.2 ("Cooperation between the content supplier and recipient is necessary to achieve successful loudness management.").

[68] Appendix A, *Final Rules* (47 C.F.R. § 73.682(e)(1), § 76.607(a)(1)). This statutory focus is consistent with other contexts, such as commercial limits in children's programming, where Congress imposed responsibility on stations/MVPDs which, in turn, required their providers to comply through contracts. *See Policies And Rules Concerning Children's Television Programming*, MM Docket No. 90-570; *Revision of Programming and Commercialization Policies, Ascertainment Requirements, and Program Log Requirements for Commercial Television Stations*, MM Docket No. 83-670; Report and Order, 6 FCC Rcd 2111, 2113, para. 11 (1991) ("*1991 Children's TV Order*") (stating an MVPD remains liable for violations of the commercial limits on cable network children's programs they carry).

[69] CALM at § 2(a) (requiring that the Commission make the RP mandatory "only insofar as such recommended practice concerns the transmission of commercial advertisements"). *See also* RP § 7 and § 8.

11. The RP recommends different courses of action for stations/MVPDs to control the audio loudness of commercials depending on whether they are "inserted" or "embedded." Appendices J and K of the RP summarize station/MVPD responsibilities with regard to the former.[70] With regard to "embedded" content, the RP recommends "[c]ooperation between the content supplier and recipient" in "fixed" dialnorm systems in order to "achieve successful loudness management" and also requires that stations and MVPDs "ensur[e] dialnorm [value] properly reflects the Dialog Level of all content."[71] The CALM Act requires that our rules "mak[e] mandatory" the RP with regard to commercials transmitted by stations/MVPDs.[72] We conclude, therefore, that the cooperative course of action the RP recommends as to embedded content "concerns the transmission of commercial advertisements" by stations/MVPDs and, therefore, that the CALM Act requires stations/MVPDs to take such actions.[73] As examination of the record reveals, the RP relies on such cooperation for effective loudness control; without it, transmission of "embedded" commercials that comport with the RP would be impractical at best.[74]

12. Our conclusion that stations/MVPDs are responsible for compliance with regard to "embedded" as well as "inserted" commercials is consistent with Congressional intent as well as the language of the statute and the RP. Examination of the legislative history reflects that Congress's purpose in regulating the volume of audio on commercials was to "make the volume of commercials and regular programming uniform so consumers can control sound levels."[75] Our reading of the statute and the RP carries out this purpose by requiring that all commercials transmitted by stations/MVPDs comport with the RP, regardless of whether they are "inserted" or "embedded." The record reflects that most commercials are not inserted in programming by stations/MVPDs, but rather upstream by broadcast or

[70] *See* RP at Annex J and Annex K. *See id.* § 8.4 ("In the case of TV station or MVPD insertion of local commercials or segments, the operator should ensure that the Dialog Level of the local insertion matches the dialnorm setting of the inserted audio stream.").

[71] See RP §7.3.2 ("Cooperation between content supplier and recipient is necessary to achieve successful loudness management when implementing [fixed dialnorm]"); § 7.3.4 ("To ensure the proper match between dialnorm value and loudness, the operator should make use of loudness metering during quality control, and when necessary make compensating adjustments to ensure the loudness meets the target value."); § 8.1.1 ("Ensure that all content meets the Target Loudness"); § 8.1.2 ("Ensure that … content is measured (see Section 5.2) and labeled with the correct dialnorm"); § 8.3 ("1) Ensure proper targeted average loudness of content in a fixed metadata system, or 2) Ensure proper dialnorm authoring matching the measured content loudness in an agile metadata system"); § H.8 ("Key Idea: Ensure that all program and commercial audio content matches the dialnorm value"); and § K.2 ("The Operator's goal is to present to the audience consistent audio loudness").

[72] 47 U.S.C. § 621(a).

[73] *Id.*

[74] *See, e.g.*, Verizon Comments at 8; NAB Comments at 8; NCTA Comments at note 5. *C.f. infra* para. 30 and note 140 (explaining that a station or MVPD can be deemed in compliance under the statute for embedded commercials by using real-time processing, but that this approach is disfavored by program producers and many viewers).

[75] *See*, *e.g.*, *House Floor Debate of S. 2847* at H7720 (Rep. Eshoo stating that the bill would "make the volume of commercials and regular programming uniform so consumers can control sound levels."); *Senate* Committee *Report to S. 2847* at 1 (stating Congress' expectation that the RP will "moderat[e] the loudness of commercials in comparison to accompanying video programming"); *House Committee Report to H.R. 1084* at 1 (stating goal of statute is "to preclude commercials from being broadcast at louder volumes than the program material they accompany"); *House Floor Debate of S. 2847* at H7720 (Rep. Eshoo stating that "[w]ith the passage of this legislation, we will end the practice of consumers being subjected to advertisements that are ridiculously loud, and we can protect people from needlessly loud noise spikes that can actually harm their hearing. This technical fix is long overdue, and under the CALM Act, as amended by the Senate, consumers will be in the driver's seat."). *See also* Eshoo Reply at 1 ("The law's intent is simple – to make the volume of commercials and programming uniform so that spikes in volume do not affect the consumer's ability to control sound.").

cable networks; in some cases, more than 95% of the commercials transmitted are embedded within programming when it is sent to stations/MVPDs.[76] Our interpretation carries out Congress's purpose by requiring compliance with the RP's provisions uniformly for all commercials transmitted by stations/MVPDs, not just the minority they happen to insert.

13. We find unpersuasive the arguments of some industry commenters that the responsibility of stations/MVPDS under the CALM Act and the RP is limited to ensuring that those commercials they insert are set to the correct dialnorm value or meet the Target Loudness.[77] Several commenters argue that imposing responsibility on stations/MVPDs for a task the RP "assigns" to others would exceed our statutory authority.[78] We do not disagree. As described above, however, the "practices" described in the RP include actions that stations and MVPDs must take to cooperate with their content providers[79] to ensure that all of the programming they transmit conforms with the RP, including commercials that they pass through in real time.[80] Thus, our interpretation is consistent with the responsibilities set forth in the RP, as well as with the statutory focus on stations and MVPDs, and does not shift responsibilities under the RP from third parties to stations/MVPDs.

14. Some commenters also argue that stations/MVPDs can only be held responsible under the Commission's regulations for actions that the RP identifies as "vital."[81] We disagree. The Annexes to the RP set forth a variety of "practices," referred to variously as "vital," "preferred," ("should" be followed), and "critical," which apply to various industry participants.[82] Some of those industry participants are subject to the CALM Act and some are not. The statute, in turn, directs us to make the RP mandatory insofar as it "concerns the transmission of commercial advertisements" by stations/MVPDs.[83] The statute makes no distinction among these types of actions or between commercials "inserted" by stations/MVPDs and others.[84] In light of the fact that the RP covers parties and practices that are outside the scope of the

[76] *See*, *e.g.*, ACA Comments at 32 (member cable systems insert fewer than 4% of transmitted commercials; *cf.* DIRECTV Comments at 19 (generally inserts 1/7 of transmitted commercials in non-broadcast programming, but no commercials in broadcast programming).

[77] *See*, *e.g.*, Verizon Comments at 13, NCTA Comments at 9-10, AT&T Comments at 4, ACA Comments at 6, TWC Reply at 2-3, DIRECTV Comments at 12, Comcast Ex Parte at 1 (October 6, 2011) (Comcast Ex Parte). We note that none of the comments filed in response to the NPRM disputed the responsibility of stations/MVPDs under the RP to pass through the metadata inserted into programming by third parties.

[78] *See*, *e.g.*, NCTA Comments at 6 (stating that "the Commission would exceed its very specific mandate to incorporate the ATSC A/85 Recommended Practice if it were to impose responsibilities on cable operators not included in that Recommended Practice."); Ex Parte Presentation of the American Cable Association (October 20, 2011) ("ACA 10/20 Ex Parte")(arguing that the Commission "lacks discretion to …alter the balance of responsibilities concerning loudness moderation assigned in the" RP.)

[79] *See* RP § 7.3.2.

[80] *See* RP § 8.1 and § 8.3.

[81] *See, e.g.*, NAB Comments at 3; ACA Comments at 11; Reply of CenturyLink at 5 ("CenturyLink Reply").

[82] The term "vital" (used only in the Annexes) indicates a course of action to be followed strictly (no deviation is permitted). The term "should" indicates that a certain course of action is preferred but not necessarily required. "Critical" elements of compliance are identified throughout the item, but the term is not defined. *See* RP § 3.1.

[83] 47 U.S.C. § 621(a). *See NPRM*, 26 FCC Rcd at 8288, para. 10.

[84] 47 U.S.C. § 621(a) (directing the FCC to "incorporat[e] by reference and mak[e] mandatory" the RP "insofar as [it] concerns the transmission of commercial advertisements" by stations/MVPDs). *See NPRM*, 26 FCC Rcd at 8288, para. 10. We note that, as the time of the CALM Act's adoption, the RP made no distinction between "vital" and "preferred" actions. We also note that the RP does not address "transmission" separately from other aspects of the program distribution process.

statute, we must exercise considerable care in implementing the statutory directive to incorporate the RP by reference to the extent that it concerns transmission of commercials by stations/MVPDs. Based on our examination of the record, we believe that the most reasonable reading of the statutory language, together with the RP itself, is to make stations/MVPDs responsible for all of the commercials that they transmit, but to recognize that their responsibilities under the RP vary for inserted and embedded content.

15. We also reject the argument that station/MVPD responsibilities under the RP as incorporated into the Commission's rules should be limited to those set forth in Annexes J and K to the RP, adopted after passage of the CALM Act.[85] These Annexes do not purport to describe all practices that concern the transmission of commercials by a station/MVPD, nor do they do so. Rather, we read them as addressing only the actions required when entities insert commercials into programming. They do not override the RP as a whole.[86] Sections 8.1 and 8.3 of the RP, directing stations and MVPDs to themselves take various actions to "ensure" the proper loudness level of all the content they transmit, not just the commercials they insert, provide that such actions are "critical" for compliance with the RP.[87] Moreover, as set forth above, the RP as a whole depends on stations' and MVPDs' cooperation with their programming providers to ensure proper loudness control for the commercials that they transmit. Neither Annex, nor any other amendment to the RP, changes the critical nature of such cooperation.

16. We believe that our reading fulfills the statutory purpose better than the narrow one advocated by some industry commenters. Interpreting the statute such that stations'/MVPDs' responsibility to ensure that they do not transmit loud commercials applies only to those commercials that they insert would render the statute largely meaningless because consistent loudness cannot be achieved without applying the RP to all commercials. That is, commercials cannot be "present[ed] to viewers at a consistent loudness" if only *some* – and not all – of the commercials conform to the engineering solutions developed in the RP. Simply put, inserting properly modulated commercials next to improperly modulated ones will not solve the loudness problem, and as a practical matter, consumers neither know nor care which entity inserts commercials into the programming stream. Congress did not intend to adopt only part of the industry's technical solution or to exclude from the solution essential elements for its success. To the contrary, Congress intended the Commission to implement the engineering solution with respect to all commercials and to make stations/MVPDs responsible for achieving that solution.[88]

17. Some commenters contend that the legislative history of the CALM Act demonstrates that Congress' intent was narrow, aiming at some but not all commercials. These commenters point to earlier, unsuccessful versions of the legislation that would have granted the Commission broad authority to establish loudness standards.[89] We disagree. The "more circumscribed language" of the CALM Act as it was ultimately adopted does not absolve stations/MVPDs of responsibility for the vast majority of commercials they transmit.[90] The legislative history reflects a Congressional decision to require regulation in accordance with the RP in lieu of a broad grant of authority for the Commission to establish technical standards.[91] As indicated above, however, nothing in the statutory language or legislative

[85] *See, e.g.*, NAB Comments at 3; ACA Comments at 11; Reply of CenturyLink at 5 ("CenturyLink Reply").

[86] *See* RP § J.1 ("The recommendations in this Annex are based on other sections of this Recommended Practice.").

[87] *Id*. at §§ 8.1 and 8.3.

[88] *See*, *e.g.*, CU Reply at 3 ("It now appears that some in the industry are trying to renegotiate the intent and language of the Act."); *see also* Eshoo Reply; Whitehouse Letter; Rockefeller Letter.

[89] *See, e.g.*, Verizon Comments at 5-6, TWC Comments at 6-7.

[90] Verizon Comments at 6, 8.

[91] *See supra* note 78.

history reflects that Congress did not intend that the RP be applied to all commercials.[92]

1. "Commercial Advertisements"

18. We affirm the NPRM's tentative conclusion that non-commercial broadcast stations would be largely unaffected by this proceeding because Section 399B of the Communications Act, as amended, prohibits them from broadcasting "advertisements."[93] The Commission has previously concluded that the prohibition in Section 399B does not apply to ancillary and supplementary services provided by non-commercial stations, such as subscription services provided on their DTV channels.[94] Accordingly, we find that non-commercial broadcast stations are excluded from the statute except to the extent they transmit commercial advertisements as part of an "ancillary or supplementary service."[95]

19. In the NPRM, we also asked whether political advertisements were "commercial advertisements,"[96] and some commenters argued for their exclusion.[97] We find no basis in the statute to exclude political advertisements from the coverage of the CALM Act. The station or MVPD transmitting the political advertisement receives consideration for airing these advertisements,[98] and we are merely requiring a candidate's advertisement to comply with a technical standard applicable to all advertisements.[99] Complying with such a technical standard with respect to a political advertisement does not constitute an editorial change that would conflict with a licensee's obligations to accept political advertisements under Section 315 of the Communications Act. Based on the current record, we also find no policy or legal reason to exempt program-length commercials or commercial advertisements promoting television programming ("promos") from the scope of the rules.[100] First, we find no basis in

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[92] *See, e.g.*, *House Floor Debate of S. 2847* at H7720 (Rep. Eshoo stating that the bill would "eliminate the earsplitting levels of television advertisements and return control of television sound modulation to the American consumer"); *Senate Committee Report to S. 2847* at 1 (stating purpose of law); NAB Comments at 3-4; RP § H.4 ("**Key Idea**: Goal is to present to the viewer consistent audio loudness across commercials, programs, and channel changes.")(*emph. in original*). *See also supra* note 75.

[93] *NPRM* at para. 11.

[94] *Id*.

[95] *Id.*

[96] *Id*.

[97] *See*, *e.g.*, HBI Comments at 4-5; AT&T Comments at 6; ACA Reply at 5, n.19; NCTA Comments at 13.

[98] This is consistent with the definition of an "advertisement" in Section 399B of the Act. Section 399B of the Communications Act defines the term "advertisement" as "any message or other programming material which is broadcast or otherwise transmitted in exchange for any remuneration, and which is intended— (1) to promote any service, facility, or product offered by any person who is engaged in such offering for profit; (2) to express the views of any person with respect to any matter of public importance or interest; or (3) to support or oppose any candidate for political office." *See* 47 U.S.C. § 399b(a). It is also consistent with the definition of "commercial matter" in the children's television commercial limits rules. In the context of commercial limits during children's programming, the Commission defines "commercial matter" as "airtime sold for purposes of selling a product or service and promotions of television programs or video programming services other than children's or other age-appropriate programming appearing on the same channel or promotions for children's educational and informational programming on any channel." *See* 47 C.F.R. § 73.670 Note 1; 47 C.F.R. § 76.225 Note. 1.

[99] *C.f. Codification of the Commission's Political Programming Policies*, MM Docket No. 91-168, Memorandum Opinion and Order, 7 FCC Rcd 1616 (1992).

[100] We note that, although the Commission specifically asked about this issue in the *NPRM*, 26 FCC Rcd at 8281, para. 11, it was not addressed at all in the comments or replies. Some ex parte filers did object to treating promotional announcements, particularly those made on premium networks, as "commercials" for purposes of the CALM Act. *See, e.g.*, Time Warner, Inc. Ex Parte (October 26, 2011), Verizon Ex Parte (December 6, 2011),

(continued….)

the statute, the legislative history, or the RP for exempting promos from the definition of commercial advertisements for the purpose of the CALM Act. Specifically, the statute does not distinguish between commercials promoting the products or services of third parties and those promoting the station's or MVPD's own commercial television programming, whether shown on the same or a different channel. The RP, which the statute directs us to incorporate by reference into our rules, likewise makes no such distinction. Instead, it distinguishes between "short form" or "interstitial" content and "long form" content, treating "promotional" material as "short form" content equivalent to advertisements.[101] Moreover, we do not believe that exempting promos would serve the statutory purpose of preventing commercials from being transmitted at louder volumes than the programming they accompany. From a consumer perspective, we believe that there is no difference between promos and other commercials. Were we to exclude promos, television programmers could advertise their own programming at a higher volume than surrounding programming or other commercial advertisements. Accordingly, we find that it is most consistent with the statutory language and purpose to require that the loudness of promos comply with the RP.[102] We emphasize that our determination that promos are covered by the definition of commercial advertisements is limited to the use of that term in the CALM Act and that this determination does not change how promos are categorized for any other purpose or Commission rule. We will address any other definitional issues surrounding "commercial advertisements" on a case-by-case basis as they arise.

2. Successor Documents

20. We observed in the NPRM that Section 2(a) mandates that the required regulation incorporate by reference and make mandatory "any successor" to the RP, affording the Commission no discretion in this regard.[103] Accordingly, we tentatively concluded that notice and comment would be unnecessary to incorporate successor documents into our rules.[104] On further reflection, we now conclude that, although the "good cause" exception excuses compliance with notice and comment requirements under these circumstances, the public interest will be better served by an opportunity for comment in most cases. Examination of the record reflects that interpretation may be required to determine how the RP successors apply to the transmission of commercial advertisements by stations/MVPDs pursuant to the CALM Act, and that interpretive work can only benefit from public input.[105] If, however, a successor is not sufficiently substantive to require interpretation or public comment, we will simply adopt the successor by Public Notice. As proposed in the *NPRM*, for the present we will incorporate by reference into our rules the current successor to the RP, adopted by ATSC prior to the adoption of this Report and

(...continued from previous page)
NCTA Ex Parte (December 6, 2011). These ex partes, however, provide no justification or rational basis for such a distinction, simply stating without support that "promotion" has alternative meanings in other contexts. We reiterate that non-commercial broadcast stations are excluded from the statute except to the extent they transmit commercial advertisements as part of an "ancillary or supplementary service." *See supra* para. 18.

[101] RP § 3.4.

[102] In this regard, we note that there is no evidence in the record that bringing "promos" into compliance will require any effort beyond that necessary to bring all other commercial advertisements into compliance.

[103] *NPRM*, 26 FCC Rcd at 8290, para. 13, quoting 47 U.S.C. § 621(a).

[104] *Id.*, citing 5 U.S.C. § 552(b)(B) (providing that Administrative Procedure Act's notice and comment requirements do not apply when the agency for good cause finds, and incorporates the finding and a brief statement of reasons therefor in the rules issued, that notice and public procedure thereon are unnecessary).

[105] *See* ACA Comments at 17 ("By eschewing a notice and comment process, the Commission will fail to fully and properly analyze and interpret the obligations placed by any 'successor' [RP] on MVPDs and programmers.").

Order.[106]

21. The ACA argues that the foregoing statutory mandate constitutes an improper delegation of legislative authority because it ties the Commission's hands and provides no guidance for the ATSC as to the content of successor standards.[107] The Commission, however, "may not ignore the dictates of the legislative branch."[108] Our obligation to incorporate by reference into our rules successor RPs is clear and, therefore, we do not address ACA's argument that we cannot incorporate the current version of the RP.[109] We note, however, that we disagree with ACA's unsupported contention that if the successor clause were held to be an improper delegation, it would render the entire CALM Act null and void "since Congress clearly considered this clause an essential part of the statute."[110] The salient question for a court would be: "'[w]ould Congress still have passed the valid sections had it known about the constitutional invalidity of the other portions of the statute?'"[111] The CALM Act as a whole does not appear to us to be so dependent, conditional, or connected to the statutory clause "and any successor thereto" as to warrant a conclusion that Congress would not have passed the CALM Act without that clause. In any event, the severability issue makes no difference here, because the current RP is consistent with the preexisting one,[112] and our rules implement the RP both as it existed at the time of the CALM Act's enactment and in its current form. In other words, our action herein would be the same in material respects in the absence of the ATSC's post-CALM Act amendments. Thus, if a court were to conclude that the successor provision in the CALM Act was an invalid but severable delegation, it would affect only incorporation of future successor RP documents.

B. Compliance and Enforcement

22. Below, we discuss procedures stations and MVPDs may follow with regard to locally

[106] *See NPRM*, 26 FCC Rcd at 8290, para. 13. As the *NPRM* indicated, we ask that the ATSC notify us whenever it approves a successor to the RP, submit a copy of it into the record of this proceeding, and send a courtesy copy to the Chief Engineer of the Media Bureau. *Id.*

[107] *See* ACA Comments at 17-20, citing, *inter alia*, *Mistretta v. United States,* 488 U.S. 361, 422 (1989) ("If rulemaking can be entirely unrelated to the exercise of judicial or executive powers, I foresee all manner of "expert" bodies, insulated from the political process, to which Congress will delegate various portions of its lawmaking responsibility… This is an undemocratic precedent that we set-not because of the scope of the delegated power, but because its recipient is not one of the three Branches of Government."); (Scalia, J., dissenting); *Carter v. Carter Coal,* 298 U.S. 238, 311 (1936) (in concluding that delegation of authority to a subset of the mining industry to set minimum wages and maximum hours of labor violated due process).

[108] *Action for Children's Television v. FCC*, 932 F.2d 1504, 1509 (D.C. Cir. 1991) (recognizing "the Commission's constraints in responding to [an] appropriations rider" that required it to ban all radio and television broadcasts of indecent material, despite the Commission's prior view that such a ban would be unconstitutional, but explaining that the court has an "independent duty to check the constitutional excesses of Congress."). *See Branch v. FCC*, 824 F.2d 37, 47 (D.C. Cir. 1987) ("although an administrative agency may be influenced by constitutional considerations in the way it interprets or applies statutes, it does not have jurisdiction to declare statutes unconstitutional."). *See also Hettinga v. United States*, 560 F.3d 498, 506 (D.C. Cir. 2009) ("As the Supreme Court has observed, it would make little sense to require exhaustion where an agency 'lacks institutional competence to resolve the particular type of issue presented, such as the constitutionality of a statute'"), quoting *McCarthy v. Madigan*, 503 U.S. 140, 147-48 (1992).

[109] *See* ACA Comments at 19-20.

[110] *Id.* at 19.

[111] *Basardh v. Gates*, 545 F.3d 1068, 1070 (D.C. Cir. 2008), quoting *U.S. v. Booker*, 543 U.S. 220 (2005)(internal quotation marks omitted).

[112] For example, Appendices J and K state that they "are based on other sections of this Recommended Practice." *See* RP § J.1 and §K.1. *See also supra* para. 15.

inserted commercials in order to be "deemed in compliance" with the rules in the event of an FCC investigation or inquiry. We then establish a "safe harbor," based on a proposal by NCTA, for stations and MVPDs to demonstrate compliance with regard to embedded commercials through certifications and periodic testing. We intend to initiate an investigation when we receive a pattern or trend of consumer complaints indicating possible noncompliance.[113] Stations or MVPDs that seek to be "deemed in compliance" or in the "safe harbor" need not demonstrate, in response to an FCC enforcement inquiry, that they complied with the RP with regard to the complained-of commercial or commercials, and they will not be held liable for noncompliant commercials that they previously transmitted.[114] The procedures we adopt, however, are optional, and any station or MVPD may instead choose to demonstrate actual compliance, in response to an FCC enforcement inquiry prompted by a pattern or trend of complaints, with the requirements of the RP with regard to the commercial(s) in question, as well as certifying to the Commission that its own transmission equipment is not at fault.[115] If unable to do so, the station or MVPD may be liable for penalties or forfeitures.[116] If we find that our approach ("deemed in compliance," "safe harbor," complaint-driven enforcement, *etc.*) does not appear to be effective in ensuring widespread compliance with the RP, we will revisit it to the extent necessary.

1. Deemed in Compliance/Safe Harbor

23. The CALM Act states that "[a]ny broadcast television operator, cable operator, or other multichannel video programming distributor that installs, utilizes, and maintains in a commercially reasonable manner the equipment and associated software in compliance with the regulations issued by the Federal Communications Commission in accordance with subsection (a) shall be deemed to be in compliance with such regulations."[117] As described in the NPRM and discussed in detail below, we conclude that the scope of this provision is limited to situations in which the station or MVPD itself installs, utilizes, and maintains the equipment required to comply with the RP.[118] Stations and MVPDs use such equipment for locally inserted commercials, and could similarly be deemed in compliance under

[113] As proposed by, *e.g.*, NCTA and ACA. NCTA Comments at 15, ACA Reply at 12. Consumers Union (CU) proposed that the Commission conduct audits of programming to verify compliance. Consumers Union Reply at 5. CU argued that this would be a "low-cost, efficient mechanism to ensure compliance," but since the goal of the statute is to improve the viewer experience, we find that responding directly to viewer concerns will be a more efficient and effective use of Commission resources.

[114] The record suggests that it is very difficult for stations or MVPDs to prove that an embedded commercial transmitted in the past actually complied with the RP. *See, e.g.*, NAB Comments at 6 ("Broadcast television stations currently do not measure every commercial that is transmitted, and such an approach would not be practical from a technical, administrative, or financial standpoint"). It becomes more difficult with the passage of time, although it is possible that some stations or MVPDs are capable of demonstrating past compliance based on their own records (*see, e.g.*, DIRECTV Ex Parte (September 16, 2011)) or by working with programmers (potentially by seeking records to compare to complaints)(*see, e.g.*, Comcast Ex Parte (October 6, 2011)).

[115] Appendix A, *Final Rules* (47 C.F.R. § 73.682(e)(6), § 76.607(a)(6)). As NCTA notes, analog transmissions are exempt from the coverage of these rules in all cases, and do not need the protection of a safe harbor. NCTA Comments at 18. If an entity can demonstrate that a pattern or trend of complaints relates to an analog transmission, it need take no further action under these rules. *See supra* para. 3.

[116] 47 U.S.C. § 503. *See also* 47 U.S.C. § 503(b)(1)(B) and 47 C.F.R. § 1.80(a)(2) (stating that any person who willfully or repeatedly fails to comply with the provisions of the Communications Act or the Commission's rules shall be liable for a forfeiture penalty).

[117] CALM Act at § 2(c).

[118] *See infra* paras. 28-29, note 140; *NPRM* at para. 16. Appendix A, *Final Rules* (47 C.F.R. § 73.682(e)(2), § 76.607(a)(2)).

the statute for embedded commercials by performing real-time processing.[119] However, we believe that stations, MVPDs, content providers, and consumers disfavor real-time processing due to its harm to overall audio quality.[120] Based on the information in the record submitted in response to the NPRM, we will establish a safe harbor for stations and MVPDs with respect to embedded commercials that does not require real-time processing.[121] The safe harbor is derived from the RP's reliance on cooperation by stations and MVPDs with upstream program providers to ensure proper loudness control of the content that is passed through to viewers in real time without additional processing by the station or MVPD.[122] Under these circumstances, the station or MVPD itself does not use the equipment necessary to encode dialnorm value into a commercial and thus does not ensure compliance through those means.[123] This safe harbor provides a simple way for stations and MVPDs to respond to an enforcement inquiry regarding embedded commercials so as to reduce their burden of demonstrating compliance without forcing them to use equipment that distorts the audio they transmit.

24. First, it is essential that stations and MVPDs have the proper equipment to pass-through RP-compliant programming. Therefore, we conclude that all stations and MVPDs must have the equipment necessary to pass through programming compliant with the RP, and be able to demonstrate that the equipment has been properly installed, maintained, and utilized. We note that the necessary equipment will vary depending on whether a station or MVPD uses an AC-3 audio system or not, whether it needs to encode incoming program streams, and other factors.[124] MVPDs will be considered compliant with this requirement so long as the processes used for transmitting to subscribers the information contained in the transmissions of digital program networks correctly maintains the relative loudness of network commercials and long-form content consistent with the RP. This equipment is required in many cases for the provision of any audio at all, and is therefore necessary but not sufficient for parties to be "deemed in compliance" under Section 2(c) of the CALM Act, to enter the "safe harbor" we establish for embedded content, or to demonstrate actual compliance with the RP. In the context of an enforcement inquiry, any station or MVPD must be prepared to certify to the Commission that its own transmission equipment is not at fault for any pattern or trend of complaints.[125]

25. Second, we have considered proposals in the record describing how stations and MVPDs may be "deemed in compliance" under the statute and the Commission's rules, and, as discussed below, we have adopted or adapted many of these suggestions in crafting our rules. We note that our approach

[119] A station or MVPD can install, utilize, and maintain, in a commercially reasonable manner, a real-time or "conventional" processor to ensure consistent loudness by limiting dynamic range, rather than by setting the dialnorm or meeting the Target Loudness. Conventional processing "modifies the dynamic range of the decoded content by reducing the level of very loud portions of the content to avoid annoying the viewer and by raising the level of very quiet portions of the content so that they are better adapted to the listening environment."

[120] Such processing can be undesirable for industry and consumers precisely because it reduces the dynamic range of the audio content. *See infra* note 140.

[121] Appendix A, *Final Rules* (47 C.F.R. § 73.682(e)(3), § 76.607(a)(3)).

[122] *See* RP § 7.3.2. *But see* para. 30 and note 140 (stations and MVPDs can comply with the RP by ensuring the loudness of embedded commercials is controlled by real-time processing, rather than through cooperation with program providers, but rarely do so).

[123] *See infra*, para. 30.

[124] *See* DIRECTV and DISH Network Ex Parte (October 27, 2011).

[125] *See* 47 C.F.R. § 1.17. Appendix A, *Final Rules* (47 C.F.R. § 73.682(e)(2)(iv), § 76.607(a)(2)(iv); § 73.682(e)(3), § 76.607(a)(3); 47 C.F.R. § 73.682(e)(5)(ii), § 76.607(a)(5)(ii); 47 C.F.R. § 73.682(e)(6), § 76.607(a)(6)). As discussed above, stations and MVPDs not deemed in compliance must also demonstrate actual compliance with the RP. *See supra* para. 22.

regarding embedded commercials is based in large part on an MVPD-focused proposal offered by NCTA, which NCTA described as having the support of other industry participants.[126]

26. Consistent with our conclusion above with respect to the scope of Section 2(c) of the CALM Act,[127] the measures set forth below for safe harbor protection with regard to embedded content fall outside of the statutory "deemed in compliance" section because they need not involve installation, use, or maintenance of "equipment and associated software" by a station/MVPD.[128] Our interpretation harmonizes Section 621(c) with the statutory command to "mak[e] mandatory" *all* of the RP's recommendations concerning the transmission of commercials by stations/MVPDs, not just those that they insert locally.[129] In contrast, interpreting Section 2(c) more broadly, as some industry commenters urge,[130] such that stations and MVPDs would not have to take any actions beyond those prescribed in Section 2(c) even with respect to embedded commercials, would place the majority of commercials that they transmit beyond the Commission's enforcement authority, thereby undermining the statutory purpose.[131]

27. In the discussion below, we describe our conclusion to establish two approaches for stations and MVPDs: (1) "deemed in compliance" (with regard to locally inserted commercials or with regard to all commercials where real-time processing is employed) and (2) "safe harbor" (with regard to embedded commercials). We emphasize, however, that following these approaches does not relieve these entities of their obligations under the CALM Act. We reiterate that all stations and MVPDs are required to comply with the RP. In response to questions raised in the NPRM,[132] the record reflects that compliance can be difficult to demonstrate retroactively.[133] Therefore, the "deemed in compliance" and "safe harbor" approaches offer alternative methods by which stations and MVPDs may demonstrate ongoing compliance with the RP in the event of a pattern or trend of complaints that leads to a Commission inquiry. If they prefer, parties may choose to demonstrate actual compliance with the RP in response to an FCC enforcement inquiry.

a. Local Insertions

28. As noted above, the CALM Act states that "[a]ny broadcast television operator, cable operator, or other multichannel video programming distributor that installs, utilizes, and maintains in a commercially reasonable manner the equipment and associated software in compliance with the regulations issued by the Federal Communications Commission in accordance with subsection (a) shall be deemed to be in compliance with such regulations."[134] Application of this standard is fairly straightforward with respect to commercial advertisements inserted into the program stream by stations or MVPDs, and we agree with NAB's argument that a station or MVPD should be deemed in compliance for these inserted commercials when it

[126] NCTA Ex Parte Comment (October 18, 2011).

[127] *See supra* para. 23.

[128] 47 U.S.C. § 621(c).

[129] *See supra* paras. 9-17.

[130] *See* AT&T Comments at 10, NAB Comments at 4, NCTA Comments at 9-10, Verizon Comments at 15-16.

[131] *See supra* paras. 12, 16.

[132] *See, e.g.*, *NPRM* at para. 28.

[133] *See supra* note 114.

[134] CALM Act at § 2(c). Appendix A, *Final Rules* (47 C.F.R. § 73.682(e)(2)(i), § 76.607(a)(2)(i)).

> uses the equipment in the ordinary course of business to properly measure the loudness of the content and to ensure that the dialnorm metadata value correctly matches the loudness of the content when encoding the audio into AC-3 for transmitting the content to the consumer.[135]

As a practical matter, and as indicated by NAB, the equipment would be used by the station or MVPD prior to the insertion of each commercial to ensure that it complies with the RP.[136]

29. In response to an enforcement inquiry concerning local insertions, a station or MVPD must provide records showing the consistent and ongoing use of this equipment in the regular course of business and demonstrating that the equipment has undergone commercially reasonable periodic maintenance and testing to ensure its continued proper operation.[137] In addition, in response to such an inquiry, the station or MVPD must certify that it either has no actual knowledge of a violation of the RP, or that any such violation of which it has become aware has been corrected promptly upon becoming aware of such a violation.[138] Upon receipt of this information and certification, the station or MVPD will be deemed in compliance with the RP with respect to commercials it inserted. We note here, as guidance for stations and MVPDs, that we do not believe that a station or MVPD that has actual knowledge of a violation but fails to correct the problem has utilized the equipment used to encode the commercials in a "commercially reasonable manner." Therefore, it is not entitled to "deemed in compliance" treatment under the statute.

b. Embedded Commercials

30. For embedded commercials, which a station or MVPD receives from an upstream programmer, we conclude that there are two options: (1) use a real-time processor to be deemed in compliance, or (2) follow the components of the "safe harbor" we describe herein.[139] Stations and

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[135] NAB Comments at 7. This general approach will remain valid even in non-AC-3 systems that will be encoding to meet the Target Loudness of the delivery channel. *See* RP § K.5. *See also, e.g.*, AT&T Comments at 9 ("'installs, utilizes, and maintains in a commercially reasonable manner' audio management systems and equipment that perform the essential functions of measuring content loudness consistent with ITU[-R] BS.1770 and transmitting normalized audio content (i.e., normalized based on the dialnorm parameter) downstream to consumers, regardless of which specific equipment and systems that station/MVPD has deployed or where in the distribution stream those functions are performed."). Appendix A, *Final Rules* (47 C.F.R. § 73.682(e)(2)(i), § 76.607(a)(2)(i)).

[136] *See* RP at § 8.4 (explaining that locally inserted commercials must have their loudness level matched to the dialnorm of the stream into which they are to be inserted prior to insertion). For non-AC-3 systems, *see* RP § K.5. In practice, program providers may inform stations and MVPDs ahead of time of the dialnorm/Target Loudness at which their programming will be provided, and local inserters, when they encode, set the loudness of the commercials they plan to insert according to this information. Cooperation between the program provider and the stations and MVPDs is necessary to achieve successful loudness management when implementing this practice. *See* RP § 7.3.2.

[137] Appendix A, *Final Rules* (47 C.F.R. § 73.682(e)(2)(ii), § 76.607(a)(2)(ii)).

[138] Appendix A, *Final Rules* (47 C.F.R. § 73.682(e)(2)(iii), § 76.607(a)(2)(iii)).

[139] We remind stations and MVPDs that they must always utilize their audio pass-through equipment so that it does not harm the RP-compliant programming they receive and transmit to their viewers. *See supra* para 24. We note that this safe harbor is an important but severable element of our compliance and enforcement scheme. We are establishing it to simplify our enforcement process for the benefit of stations and MVPDs, but it is not so fundamental to the scheme as a whole that the CALM Act regulations adopted in the item would be unenforceable in its absence. If the safe harbor is declared invalid or unenforceable for any reason, it is our intent that the remaining CALM Act regulations shall remain in full force and effect. As mentioned above, the safe harbor does not replace the basic obligation of all stations and MVPDs to comply with the requirements of the RP. *See supra* para. 26. As is typical in many other areas of Commission regulation, regulated entities still could seek to demonstrate on a case-by-case basis that they have done all that is required in response to an investigation.

MVPDs are not able to modify the embedded commercials they transmit to viewers except by use of real-time processing equipment that distorts the audio.[140] Commenters report, and our engineering analysis confirms, that no equipment is currently available that stations or MVPDs can use to set the dialnorm value or meet the Target Loudness[141] in real time for embedded commercials they transmit to viewers.[142] Nor are they in direct control of the production or encoding of these commercials such that they could use their equipment to bring them into compliance with the RP prior to transmission (even if they have access to the commercials prior to transmission). Nonetheless, as explained above, the CALM Act requires stations and MVPDs to ensure the compliance of these commercials with the statute and our rules.[143]

31. Given the limitations in their options for controlling embedded commercials onsite, stations and MVPDs are likewise limited in their ability to rely exclusively on equipment to be deemed in compliance. Therefore, relying on the record and the RP, we establish a regulatory safe harbor, in which stations and MVPDs can take the steps discussed below to, first, significantly reduce the likelihood of any noncompliance with the RP, and, second, quickly resolve any problems that do arise. The safe harbor is based on a proposal filed by NCTA.[144] We largely adopt the framework of NCTA's proposal and, at the same time, modify several components in order to ensure that the goals of the statute are fully achieved.

32. To use the safe harbor, stations and MVPDs must undertake certain activities: obtain widely available certifications of compliance from programmers; conduct annual spot checks of non-certified programming to ensure compliance with the RP (for larger stations and MVPDs);[145] and conduct spot checks of specific channels in the event the Commission notifies the station or MVPD of a pattern or trend of complaints. Not all MVPDs or stations must perform an annual spot check in order to use the safe harbor. Following NCTA's proposal, we rely on the largest MVPDs and stations to perform spot checks in the specific situations discussed below. Because we anticipate that the need for annual spot checks will diminish after the first two years, due in part to the likely increase in the number of programmers that certify compliance, we terminate the requirement for annual spot checks after two years

[140] A station or MVPD can be deemed in compliance if it "installs, utilizes, and maintains in a commercially reasonable manner" a real-time or "conventional" processor to ensure consistent loudness by limiting dynamic range, rather than by setting the dialnorm or meeting the Target Loudness. A station or MVPD relying on real-time processing must provide records showing the consistent and ongoing use of this equipment in the regular course of business and demonstrating that the equipment has undergone commercially reasonable periodic maintenance and testing to ensure its continued proper operation; certify that it either has no actual knowledge of a violation of the ATSC A/85 RP, or that any violation of which it has become aware has been corrected promptly upon becoming aware of such a violation; and certify that its own transmission equipment is not at fault for any pattern or trend of complaints. Appendix A, *Final Rules* (47 C.F.R. § 73.682(e)(4), § 76.607(a)(4)). As discussed above, conventional processing "modifies the dynamic range of the decoded content by reducing the level of very loud portions of the content to avoid annoying the viewer and by raising the level of very quiet portions of the content so that they are better adapted to the listening environment." We recognize, however, that such processing can be less desirable for industry and consumers in some cases, precisely because it reduces the dynamic range of the audio content. *See supra* note 120, *see* RP § 9.1.

[141] Target Loudness is a specified value established to facilitate content exchange from a content supplier to station/MVPDs. *See* RP § 3.3.

[142] NCTA Comments at 8; DIRECTV Comments at 10; ACA Comments at i; Reply of Time Warner Cable, Inc. at 6 ("TWC Reply"); *see also*, NAB Comments at 6. *See also infra* note 119.

[143] *Id*.

[144] NCTA Ex Parte (October 18, 2011).

[145] If necessary, MVPDs and stations can contract to have third parties perform the spot checks.

on an individual channel or program stream basis, provided no problems are found and certifications remain in force.[146]

33. In formulating the safe harbor, we began with the proposal in the NPRM to consider contractual arrangements and quality control monitoring as a practical means to address embedded commercials.[147] For example, we asked in the NPRM whether parties should rely on contracts with programmers to ensure compliance, and if that approach had downsides for small stations and MVPDs.[148] Commenters responded with concerns about a purely contractual approach, particularly for smaller entities.[149] As a result, we have moved away from a contractual approach and adopt instead the requirement that certifications be widely available.[150] We also asked in the NPRM "what, if any, quality control measures [stations and MVPDs] should take to monitor the content delivered to them for transmission to consumers."[151] Commenters objected to a requirement for constant monitoring, and the safe harbor instead requires spot checks in some cases.[152] The following paragraphs describe these and other requirements for using the safe harbor.

(i) Certified Programming

34. A station or MVPD will be eligible for the safe harbor with regard to the embedded commercials in particular programming if the supplier of the programming has provided a certification that its programming is compliant with the RP, and the station or MVPD has no reason to believe the certification is false.[153] A programmer's certification must be available to all stations and MVPDs in order to count as a "certification" for purposes of being in the safe harbor.[154] Virtually all MVPDs receive the same programming feed of a given channel.[155] Consequently, if the programmer provides RP-compliant programming and commercials to one station or MVPD, then it should be similarly compliant for all stations and MVPDs receiving that same programming. NCTA proposed use of a widely available certification (available through a website, for instance) as an alternative to the NPRM proposal for contractual terms that would promise compliant commercials.[156] NCTA expressed concern about possible delays and expense to open and re-negotiate numerous individual contracts, and proposed that widely

[146] *See infra* para. 40.

[147] *NPRM* at paras. 23-24.

[148] *NPRM* at paras. 24-25.

[149] *See, e.g.*, ACA Comments at 26-27.

[150] *See infra* para. 34.

[151] *NPRM* at para. 24.

[152] *See infra* paras. 35-37, 41-42; *see also, e.g.*, NCTA Comments at 8, NAB Reply at 5.

[153] Appendix A, *Final Rules* (47 C.F.R. § 73.682(e)(3)(i)(B), § 76.607(a)(3)(i)(B)). *See also, infra,* para. 41-42 (a station or MVPD must perform a spot check in response to a Commission inquiry arising from a pattern or trend of complaints concerning commercials in certified programming in order to remain deemed in compliance).

[154] Appendix A, *Final Rules* (47 C.F.R. § 73.682(e)(3)(i)(A), § 76.607(a)(3)(i)(A)). NCTA has suggested that these certifications could be available on websites, perhaps accessible only to distributors of the programming in questions. NCTA Ex Parte (October 18, 2011). We express no opinion on the appropriate way to make certifications widely available, so long as they are available to all stations and MVPDs that distribute the programming.

[155] NCTA Ex Parte at 1 (October 18, 2011).

[156] NCTA Ex Parte (October 18, 2011).

available certifications avoid these problems.[157] ACA raised similar concerns regarding the difficulty smaller operators face in getting modifications to their programming contracts, even when, as here, the changes would be costless to the programmer.[158] In addition, many programmers have corporate or financial relationships with particular MVPDs, raising the possibility that certifications might be offered only to an affiliated MVPD or provided on more favorable terms to certain MVPDs. Widely available certifications, as proposed by NCTA, solve all of these problems by obviating the need for individual contractual certifications. Because, as discussed above, the same program feed goes to all distributors, as a practical matter an individual certification would provide the same assurance as a widely available certification. Not all parties, however, would know of the existence of the certification, placing some at an unfair disadvantage because they would be unaware of something that would allow them to avoid the need for spot checks. Therefore, we require that a certification be widely available in order to qualify as a certification for purposes of being in the safe harbor.[159] We express no opinion on the appropriate duration of certifications, but in order for a station or MVPD to rely on a certification, that certification must be in effect. If a programmer terminates a certification, stations and MVPDs that are required to perform annual spot checks must begin to perform annual spot checks of the programmer's channel (as discussed immediately below) in order to continue to be in the safe harbor regarding commercials on that channel. This will be the case even if they are performing no other annual spot checks because those spot checks have "phased-out," as discussed in paragraph 40, below. We encourage programmers to provide initial widely available certifications before December 13, 2012, when the rules take effect, to reduce the number of annual spot checks that stations and MVPDs would need to do to be in the safe harbor.

(ii) Non-Certified Programming: Annual Spot Checks

35. In order to be in the safe harbor regarding commercial channels and programming for which there is no programmer certification, larger MVPDs and stations must perform annual spot-checks of the non-certified commercial programming they carry.[160] Specifically, large television stations[161] and very large MVPDs[162] must annually spot check 100 percent of noncertified programming carried by the station, or by any system operated by the MVPD.[163] Large (but not "very large") MVPDs[164] must

[157] NCTA Ex Parte at 4 (October 18, 2011).

[158] ACA Ex Parte at 3 (September 19, 2011).

[159] We note that stations and MVPDs will have a year to work with their programmers before the CALM Act rules take effect. CALM Act at § 2(B)(1).

[160] Stations and MVPDs have told us that they cannot distinguish between programming and embedded commercials. *See, e.g.*, Verizon Comments at 6. As a result, the entirety of a programming stream must be monitored in order to find any noncompliant embedded commercials. We may revisit this matter in the future if technological developments warrant, given the statute's limitation to commercials.

[161] "Large" television stations, for these purposes, are those not considered "small television stations" under the Small Business Act definition – that is, those that have more than $14.0 million in annual receipts. 13 C.F.R. § 121.201, NAICS Code 515120 (2007). To provide certainty and clarity to stations, we will consider "large" those stations with more than $14.0 million in annual receipts in calendar year 2011. *See, e.g.*, BIA Kelsey Inc. Media Access Pro Television Database, showing the annual receipts for 2010. We will rely on the version of this list that is based on data available as of December, 31 2011 for purposes of the rules implementing the CALM Act.

[162] "Very large MVPDs" are defined, for these purposes, as those with more than 10 million subscribers nationwide. To provide certainty and clarity to MVPDs, we will consider "very large" those MVPDs with more than 10 million subscribers as of December 31, 2011. Per NCTA, this would include the four largest MVPDs. *See* http://www.ncta.com/Stats/TopMSOs.aspx (visited November 16, 2011) showing the numbers of subscribers for the top 25 MVPDs based on 2010 data. We will rely on the version of this list that is based on data available as of December, 31 2011 for purposes of the rules implementing the CALM Act.

[163] Appendix A, *Final Rules* (47 C.F.R. § 73.682(e)(3)(ii), § 76.607(a)(3)(ii)(A)).

annually spot check 50 percent (chosen at random) of the noncertified channels carried by any system operated by the MVPD.[165] Stations and MVPDs should not count (and do not need to spot check) duplicating channels or streams unless there is some reason to believe that the audio on, for instance, an SD stream might be different (for the purposes of the RP) from the HD stream of the same programming.[166] Small stations and small MVPDs need not perform any annual spot checks to be in the safe harbor.[167] The first set of annual spot checks must be completed by December 13, 2013 – that is, one year after the effective date of these rules.

36. Because small stations and MVPDs are not required to perform annual spot checks, there is no requirement that they purchase (or seek access to) loudness measurement equipment prior to a Commission inquiry. In the event of an inquiry, stations and MVPDs will have 30 days to complete a spot check.[168] This will allow small entities to preserve their financial flexibility while still being in a position to address a pattern or trend of complaints brought to their attention by the Commission. We note, however, that small stations and MVPDs, just like larger ones, are required by the CALM Act and our rules to comply with the requirements of the RP. And, in the event of an enforcement inquiry, these small entities must be able to demonstrate that they have the equipment necessary to pass through programming compliant with the RP, demonstrate that the equipment has been properly installed, maintained, and utilized, and show that the equipment was not the source of any problem.[169]

37. Under our approach, we place differing obligations depending on the size of the entity. These distinctions are based on both the valid NCTA argument that, if the larger companies take care of performing spot checks and obtaining certifications, the same programming carried by smaller companies is likely to comply with the CALM Act, and on our interest in reducing burdens on small entities.[170] Each very large MVPD is required to spot check each non-certified channel on only one of its systems that carry that programming.[171] Given that all programmers, including each regional sports network, may

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[164] "Large MVPDs," for these purposes, are those serving more than 400,000 subscribers nationwide. This definition is derived from the Commission's definition of "small" cable in 47 C.F.R. § 76.901(e). To provide certainty and clarity to MVPDs, we will consider "large" those MVPDs with more than 400,000 but fewer than 10 million subscribers as of December 31, 2011. Per NCTA, this would include 11 MVPDs. *See* http://www.ncta.com/Stats/TopMSOs.aspx (visited November 16, 2011) showing the numbers of subscribers for the top 25 MVPDs based on 2010 data. We will rely on the the version of this list that is based on data available as of December, 31 2011 for purposes of the rules implementing the CALM Act.

[165] Appendix A, *Final Rules* (47 C.F.R. § 76.607(a)(3)(ii)(B)).

[166] This avoidance of duplication largely addresses the concerns raised by DIRECTV and DISH Network in their November 16, 2011 ex parte filing, about the number of channels they could potentially be required to spot check in the absence of certifications.

[167] Appendix A, *Final Rules* (47 C.F.R. § 73.682(e)(3)(iii), § 76.607(a)(3)(iii)).

[168] An inquiry is unlikely to be directed to a small station or MVPD even in the event of a pattern or trend of complaints, unless the complaints have come largely or solely from viewers of the small entity in question. *See infra* para. 48 ("If we receive complaints that indicate a pattern or trend affecting multiple MVPDs or stations, we will be conscious of the greater resources available to large entities when determining where to address our initial inquiries.").

[169] This equipment, fundamental to the provision of audio, is distinct from the loudness measurement equipment discussed below.

[170] NCTA Ex Parte (October 18, 2011).

[171] We recognize that very large MVPDs carry different programmers on different systems. They need not spot check the same programmer on more than one system, but they must utilize as many systems as necessary to be sure

(continued….)

not be carried by the top four MVPDs, we also require the middle group of MVPDs (those with more than 400,000 but fewer than 10 million subscribers) to conduct a more limited number of spot checks. We do this to increase the likelihood that all programmers will be checked and that programming provided to all geographic areas, including regional programming, will be tested. As the parties explain, requiring annual spot checks by smaller stations and MVPDs is both unnecessary and more burdensome than asking the same of larger parties.[172] Unlike larger stations and MVPDs, many smaller entities lack the necessary loudness measurement equipment, and, while it is appropriate to require smaller entities to obtain the use of such equipment in the case of complaints, there is little benefit to requiring small entities to do so simply in order to check a programming stream that is already being checked by others. Under our approach, small entities would be freed from the need to purchase loudness monitoring equipment, an additional expense that would provide insufficient countervailing benefit if mandated. As noted above, even the burden on larger entities of conducting annual spot checks is limited because the timeframe for conducting the annual spot checks is limited to the two years after the rules take effect for the MVPD or station, assuming no noncompliance is found.

38. *Definition of Spot Checks*. A "spot check" requires monitoring 24 uninterrupted hours of programming with an audio loudness meter employing the measurement technique specified in the RP, and reviewing the records from that monitoring to detect any commercials transmitted in violation of the RP.[173] To promote the reliability of the spot check, the station or MVPD must not provide prior notice to the programmer of the timing of the spot check. This requirement applies with respect to all spot checks (annual or in response to a Commission inquiry) on all programming, and for all stations and MVPDs – large and small. Stations (and occasionally MVPDs) may have multiple program suppliers for a single channel/stream of programming. In these cases, there may be no single 24-hour period in which all program suppliers are represented. In such cases, an annual spot check could consist of a series of loudness measurements over the course of a 7-day period, totaling no fewer than 24 hours, that measure at least one program, in its entirety, provided by each non-certified programmer that supplies programming for that channel or stream of programming.[174] To verify that the operator's system is properly passing through loudness metadata, spot checking must be conducted after the signal has passed through the operator's processing equipment (*e.g.*, at the output of a set-top box or television receiver).[175] If a problem is found, a station or MVPD may check multiple points in its reception and transmission process to determine the source of the noncompliance. For a spot check to be considered valid, a station or MVPD must be able to demonstrate appropriate maintenance records for the audio loudness meter,[176] and

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they spot check 100% of the non-certified commercial programmers. This may require running tests on more than one system, if not all non-certified channels offered by an MVPD are carried on any one system.

[172] NAB Ex Parte (November 9, 2011); ACA Ex Parte at 3-4 (November 9, 2011); NCTA Ex Parte (October 18, 2011).

[173] Appendix A, *Final Rules* (47 C.F.R. § 73.682(e)(3)(iv), § 76.607(a)(3)(iv)). We do not anticipate that a spot-check would require a person to monitor a channel in real-time. A possible procedure could be: 1) connect a loudness meter conforming to the RP to the output of a set-top box, measure the long-term loudness of all the elements of the soundtrack and log the loudness of content in 1 second intervals over a 24-hour period; 2) review the logs (which could be done with an automated process) to identify any potential violations of the RP (*i.e.*, the average measured loudness exceeds the target loudness by more than 2 dB for the duration of a commercial); and 3) ascertain whether those potential violations occurred during a commercial (*e.g.*, by reviewing a recording of the monitored content or obtaining from the programmer a log of the commercials for the day that was monitored).

[174] Appendix A, *Final Rules* (47 C.F.R. § 73.682(e)(3)(iv)(C)(II), § 76.607(a)(3)(iv)(C)(II)).

[175] Appendix A, *Final Rules* (47 C.F.R. § 73.682(e)(3)(iv)(A), § 76.607(a)(3)(iv)(A)).

[176] Appendix A, *Final Rules* (47 C.F.R. § 73.682(e)(3)(iv)(B), § 76.607(a)(3)(iv)(B)).

to demonstrate, at the time of any enforcement inquiry, that appropriate spot checks had been ongoing.[177]

39. *Exclusion of Broadcast Programming from Spot Checks*. We will not require MVPDs to include broadcast television programming in their annual spot checks. Unlike the non-broadcast programming carried by MVPDs, which is provided by third parties totally outside the scope of these rules, a significant amount of broadcast programming will already be annually spot checked by large broadcast stations pursuant to these rules. More to the point, we have explicit jurisdiction over broadcast stations themselves under the Act, and any problems arising as a result of the loudness of their commercials can be more effectively dealt with by addressing them directly with broadcast stations. This is particularly important with must-carry broadcast signals, which MVPDs are prohibited from either modifying or dropping.[178] All MVPDs are responsible for not harming the broadcast signal, however, and must properly use the necessary equipment to pass through programming compliant with the RP, such that the broadcast programming is transmitted without altering its compliance with the RP. We note that, if the Commission becomes aware of a pattern or trend of complaints about broadcast programming carried on an MVPD, while over-the-air viewers of the same programming have not filed similar complaints, that may indicate that there is a problem with the MVPD's transmission equipment, for which the MVPD will be liable.

40. *Phase-Out of Annual Spot Check Obligation*. Once a given station or MVPD has performed two consecutive annual spot checks on a given channel or program stream and encountered no evidence of noncompliance, it may cease to perform annual spot checks of that programming but continue to be in the safe harbor with respect to that programming.[179] Because this phase-out applies to individual channels or program streams, any new, non-certified channel or programming must undergo the full two years of spot checks before the requirement phases out with respect to that programming.[180] Although "large" MVPDs (between 400,000 and 10,000,000 subscribers) will be spot checking only 50 percent of their non-certified programming, they are also excused from continued checks after two years, except that if any annual spot check shows noncompliance, the two-year requirement for that channel or programming will be reset (that is, the two-year period will begin anew for that channel or programming until there is no noncompliance for a full two years).[181] Similarly, if a spot check undertaken in response to an enforcement inquiry in the context of a pattern or trend of complaints (discussed below) reveals noncompliance, the two-year requirement will be reset for that channel or programming even if it has been previously phased out.[182]

(iii) Pattern or Trend of Complaints: Spot Checks

41. If the Commission becomes aware of a pattern or trend of sufficiently specific complaints, it may open an enforcement inquiry with the station or MVPD in question.[183] Whether

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[177] Appendix A, *Final Rules* (47 C.F.R. § 73.682(e)(3)(iv)(C)(I), § 76.607(a)(3)(iv)(C)(I)).

[178] NCTA Comments at 13.

[179] Appendix A, *Final Rules* (47 C.F.R. § 73.682(e)(3)(iv)(C)(III), § 76.607(a)(3)(iv)(C)(III)). The two years runs from the effective date of the rules as to the given station or MVPD. This phase-out of annual spot checks does not affect the obligation to perform spot checks in response to an enforcement inquiry in the context of a pattern or trend of complaints, as discussed below.

[180] Appendix A, *Final Rules* (47 C.F.R. § 73.682(e)(3)(iv)(C)(IV), § 76.607(a)(3)(iv)(C)(IV)). We expect and encourage MVPDs to seek certification from new programmers as part of their carriage negotiations.

[181] Appendix A, *Final Rules* (47 C.F.R. § 73.682(e)(3)(iv)(C)(V), § 76.607(a)(3)(iv)(C)(V)).

[182] Appendix A, *Final Rules* (47 C.F.R. § 73.682(e)(3)(iv)(C)(V), § 76.607(a)(3)(iv)(C)(V)).

[183] By a "pattern or trend" we mean complaints sufficiently numerous and specific to justify focused review by the station/MVPD and the Commission. We decline to define what number of complaints is sufficient to constitute a

(continued….)